



The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

12/15/10

Ryan Mingo  
Assistant District Attorney, Suffolk County

Dear ADA Mingo,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED]. Included are copies of the following:

1. Drug Analysis Laboratory Receipt.
2. Curriculum Vitae for Annie Khan, and Peter Piro.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

I, Annie Khan (Dookhan), was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Khan (Dookhan)  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6631  
[Annie.Khan@state.ma.us](mailto:Annie.Khan@state.ma.us)

**DRUG RECEIPT**CC # [REDACTED]  
BOOK # 65  
PAGE # 115  
DESTRUCTION # \_\_\_\_\_District/Unit D-4 DCU  
Name & Rank of Arresting Officer Sgt. Det. Keenan ID# 10652

DEFENDANT'S NAME

ADDRESS

CITY

STATE

DorchesterMA

DESCRIPTION OF ITEMS SUBMITTED

GROSS  
QUANTITYGROSS  
WEIGHT

## LAB USE ONLY

ANALYSIS  
NUMBERTan Powder (heroin)2 p/b's4.63 gmTan Powder (heroin)2 p/b's4.65 gmHeroin45.59 gm(EAS)

To be completed by ECU personnel only

Name and Rank of Submitting Officer P.O. Wozniak ID# 11070Received by [Signature] Date 8.4.10

ECU Control # \_\_\_\_\_

## Curriculum Vitae

Annie Khan (Dookhan)

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.

\*Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\*Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### Additional Training:

Dept. of Justice – Forensics Professionals.

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## **Curriculum Vitae**

**Peter Piro**

### **EDUCATION**

**Boston University**

**B.A. in Chemistry and Minor in Biology, 1989**

### **HONORS**

**Magna Cum Laude, 3.6 GPA**

**Graduated with Distinction in Chemistry**

**Valedictorian of the Chemistry Department**

### **EXPERIENCE**

#### **Department of Public Health/State Laboratory Institute**

**Laboratory Supervisor I/Chemist III, II, I/ Assistant Analyst**      **December 1991-Present**  
Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Train staff and coordinate schedules. Analyze controlled substances for State and Federal law enforcement agencies. Develop, oversee, and make improvements to the GC/MS laboratory's quality assurance/quality control (QA/QC) program. Serve as the Technical Supervisor of the Drug Analysis Laboratory. Responsible for planning and implementing Quality Improvement (QI) projects. Make recommendations for protocols and procedures by developing methods so work can be performed in an accurate and efficient manner. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

#### **Massachusetts Health Research Institute**

**Laboratory Technician**      **September 1990-December 1991**  
Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank using cELISA and bioassays.

### **TRAINING AND ORGANIZATIONS**

- \* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- \* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- \* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995 and a member of the Massachusetts Organization of State Engineers and Scientists.
- \* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- \* Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25<sup>th</sup> 2002, at Agilent Technologies.
- \* Notary Public since 1993.

No. [REDACTED] Date Analyzed: 11-8-10  
City: Boston D.C.U. Police Dept.  
Officer: P.O. MARGARET WAGGETT  
Def: [REDACTED]  
Amount: Subst: SUB  
No. Cont: 2 Cont: pb  
Date Rec'd: 08/04/2010 No. Analyzed: 1  
Gross Wt.: 4.63 Net Weight: 0.10  
# Tests: 4 ASD  
• 2 P.P.12  
Prelim: Heroin Findings: Heroin

No. [REDACTED] Date Analyzed: 11-8-10  
City: Boston D.C.U. Police Dept.  
Officer: P.O. MARGARET WAGGETT  
Def: [REDACTED]  
Amount: Subst: SUB  
No. Cont: 2 Cont: pb  
Date Rec'd: 08/04/2010 No. Analyzed: 1  
Gross Wt.: 4.65 Net Weight: 0.09  
# Tests: 4 ASD  
• 2 P.P.12  
Prelim: Heroin Findings: Heroin

No. [REDACTED] Date Analyzed: 11-8-10  
City: Boston D.C.U. Police Dept.  
Officer: P.O. MARGARET WAGGETT  
Def: [REDACTED]  
Amount: Subst: SUB  
No. Cont: 4 Cont: pb  
Date Rec'd: 08/04/2010 No. Analyzed: 1  
Gross Wt.: 5.59 Net Weight: 0.19  
# Tests: 4 ASD  
• 2 P.P.12  
Prelim: Heroin Findings: Heroin

# DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Boston ANALYST ASJ

No. of samples tested:            Evidence Wt.           

## PHYSICAL DESCRIPTION:

Beige powdered substance  
in 2 pbs

doubt bagged

Gross Wt ( 2 ): 0.6079

Gross Wt ( 1 ): 0.3441

Pkg. Wt:           

Net Wt: 0.1024

## PRELIMINARY TESTS

### Spot Tests

Cobalt  
Thiocyanate (+)

Marquis +

Froehde's +

Mecke's +

### Microcrystalline Tests

Gold  
Chloride           

TLTA ( )           

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS Heroin

DATE 1-2-10

## GC/MS CONFIRMATORY TEST

RESULTS Heroin

MS  
OPERATOR PJP

DATE 1-08-10

# DRUG POWDER ANALYSIS FORM

SAMPLE #                      AGENCY Boston ANALYST ASD

No. of samples tested:            Evidence Wt.           

## PHYSICAL DESCRIPTION:

Beige powdered substance  
17 2 pbs

double bagged

Gross Wt ( 2 ): 0.6491

Gross Wt ( 1 ): 0.3043

Pkg. Wt:           

Net Wt: 0.0995

## PRELIMINARY TESTS

### Spot Tests

Cobalt  
Thiocyanate (+)

Marquis +

Froehde's +

Mecke's +

### Microcrystalline Tests

Gold  
Chloride           

TLTA ( )           

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS Heroin

DATE 11-2-10

## GC/MS CONFIRMATORY TEST

RESULTS Heroin

MS  
OPERATOR PJP

DATE 11-8-10

# DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Boston ANALYST ADD

No. of samples tested:           

Evidence Wt.           

## PHYSICAL DESCRIPTION:

Beige powdered substance  
in 4 pbs

triple bagged

Gross Wt ( 4 ): 1.3440

Gross Wt ( 1 ): 0.4416

Pkg. Wt:           

Net Wt: 0.1955

## PRELIMINARY TESTS

### Spot Tests

Cobalt  
Thiocyanate ( + )           

Marquis +           

Froehde's +           

Mecke's +           

### Microcrystalline Tests

Gold  
Chloride           

TLTA ( )           

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS Heroin

DATE 11-2-10

## GC/MS CONFIRMATORY TEST

RESULTS Heroin

MS  
OPERATOR PJP

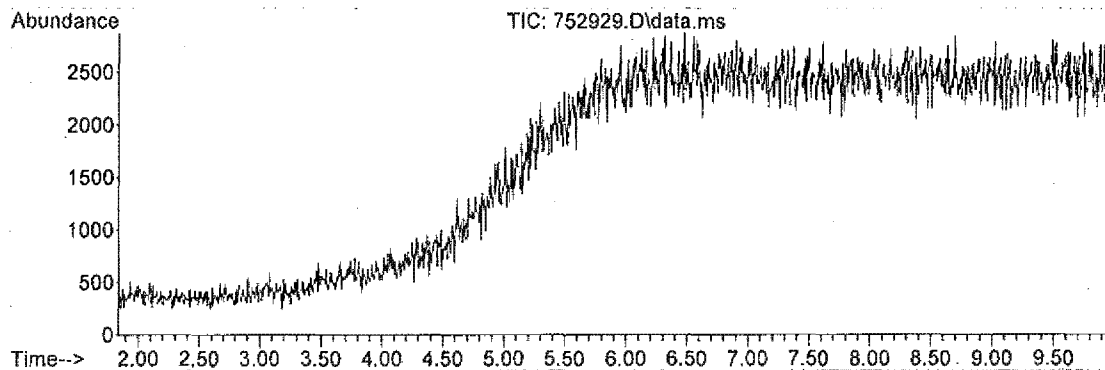
DATE 11-8-10



✓ P.P.E  
12-10-10

## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752929.D  
Operator : P. PIRO  
Date Acquired : 3 Nov 2010 16:27  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

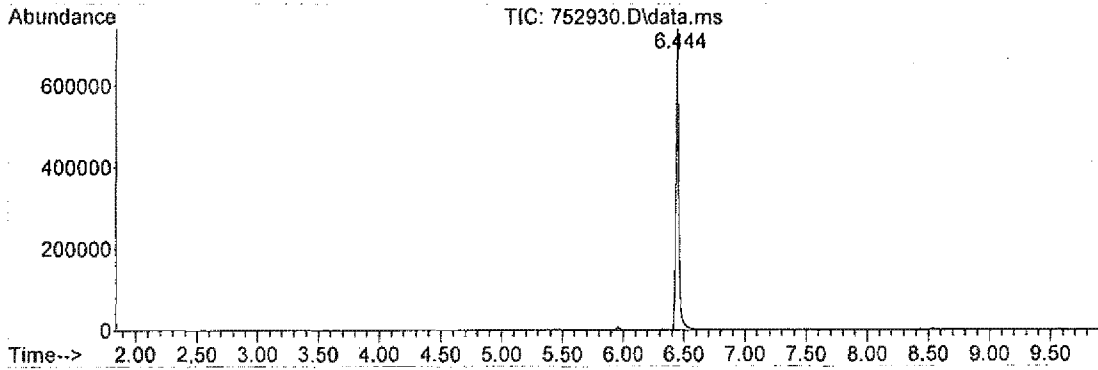


Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752930.D  
 Operator : P. PIRO  
 Date Acquired : 3 Nov 2010 16:39  
 Sample Name : HEROIN STANDARD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.444	1153024	100.00	100.00

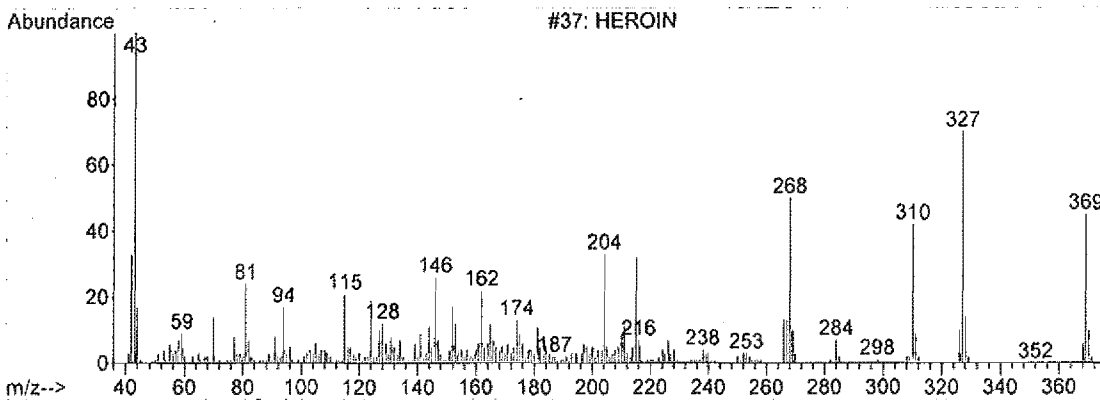
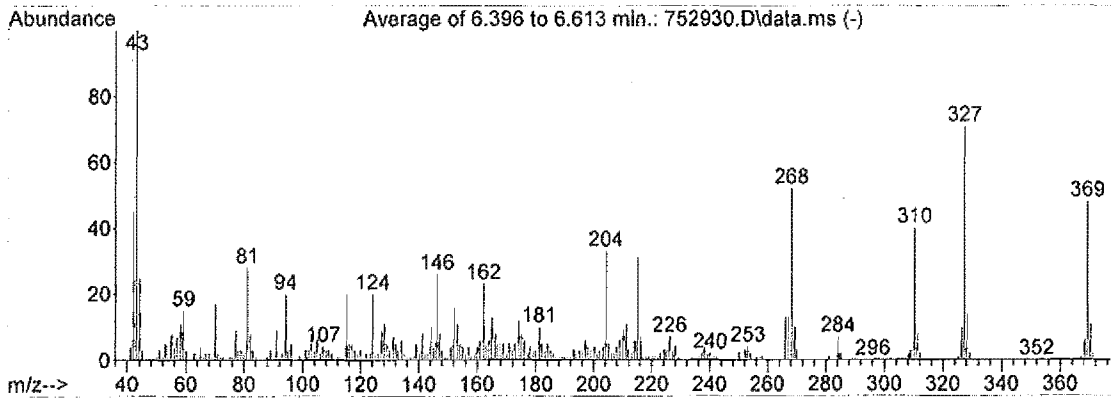
# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752930.D  
 Operator : P. PIRO  
 Date Acquired : 3 Nov 2010 16:39  
 Sample Name : HEROIN STANDARD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

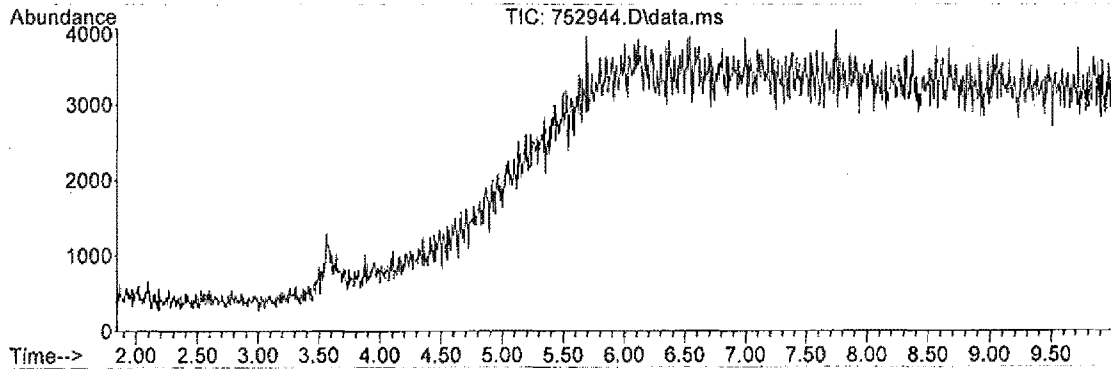
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.44	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		HEROIN	000561-27-3	99



## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752944.D  
Operator : P. PIRO  
Date Acquired : 3 Nov 2010 19:36  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

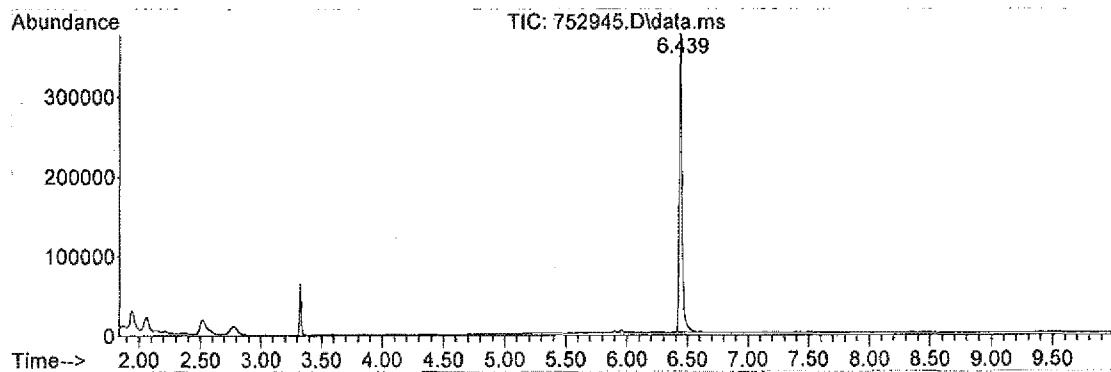


Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752945.D  
Operator : P. PIRO  
Date Acquired : 3 Nov 2010 19:49  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.439	581263	100.00	100.00

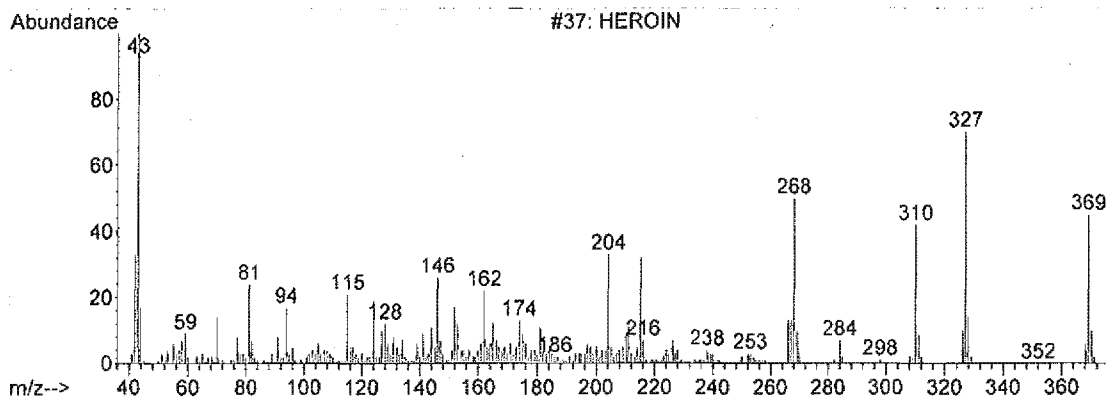
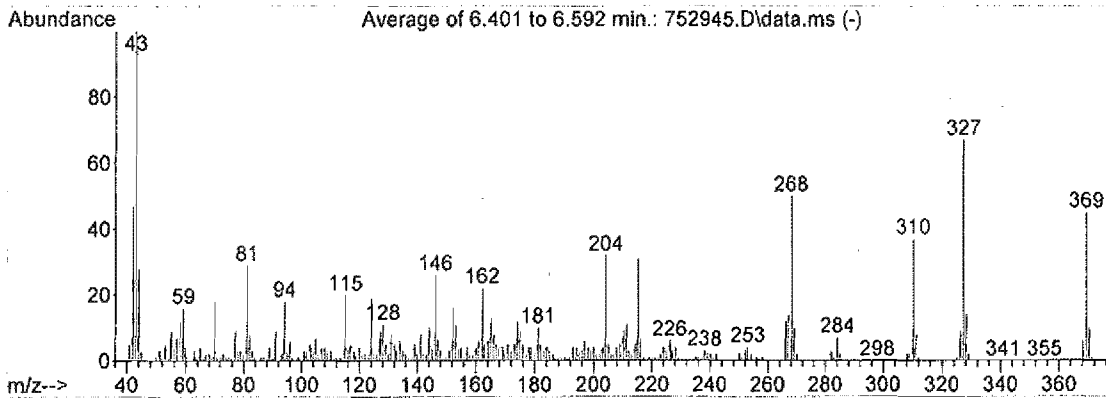
# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752945.D  
 Operator : P. PIRO  
 Date Acquired : 3 Nov 2010 19:49  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 45  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

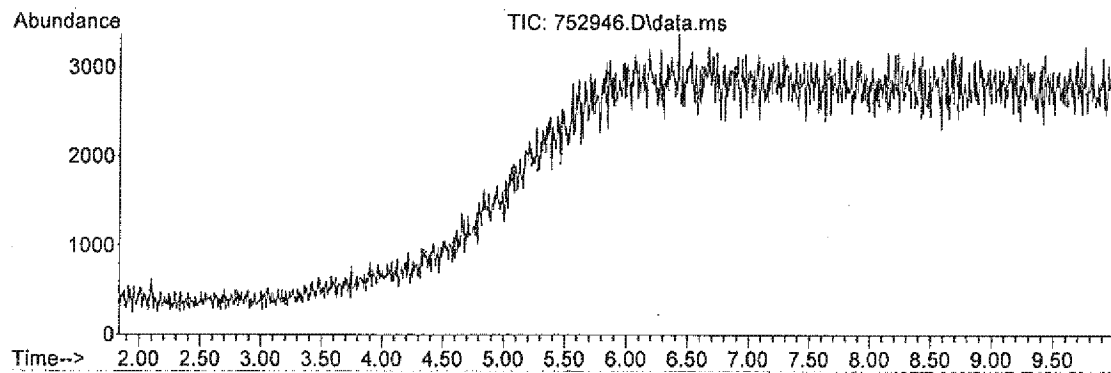
PK#	RT	Library/ID	CAS#	Qual
1	6.44	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		HEROIN	000561-27-3	96



## Area Percent / Library Search Report

## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752946.D  
Operator : P. PIRO  
Date Acquired : 3 Nov 2010 20:01  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



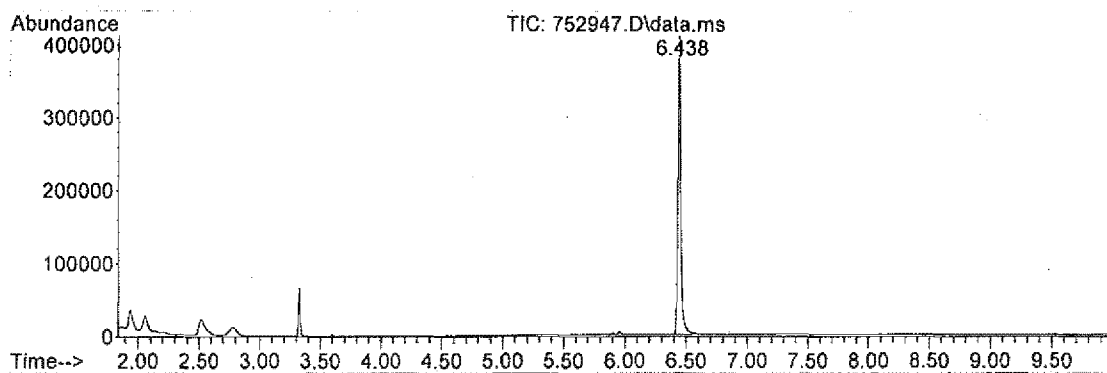
Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752947.D  
 Operator : P. PIRO  
 Date Acquired : 3 Nov 2010 20:14  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 47  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.438	655675	100.00	100.00



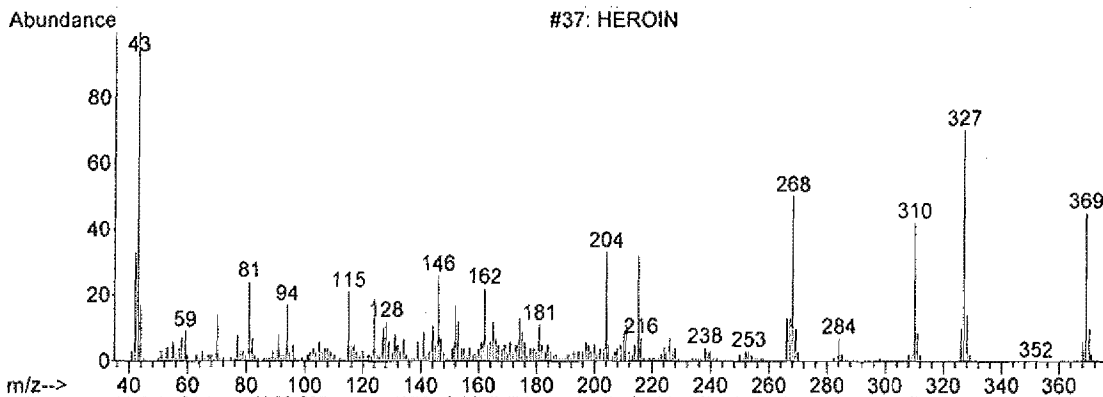
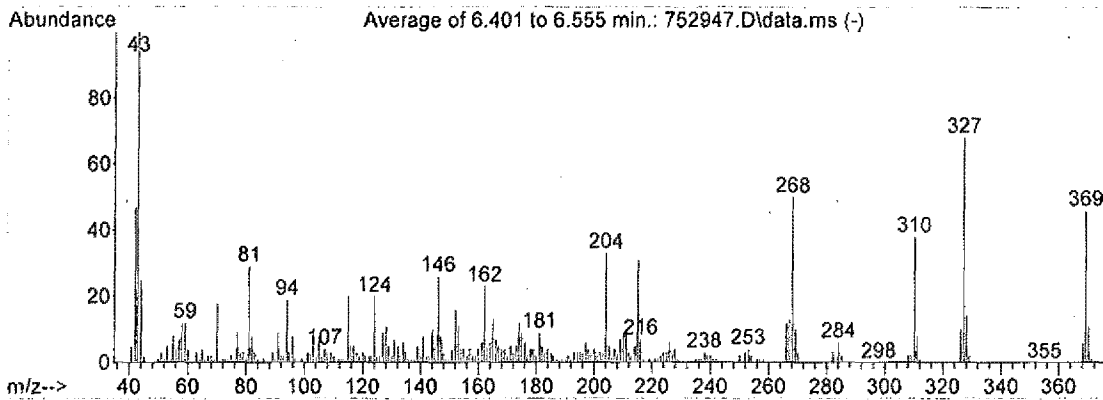
# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752947.D  
 Operator : P. PIRO  
 Date Acquired : 3 Nov 2010 20:14  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 47  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.44	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		HEROIN	000561-27-3	94



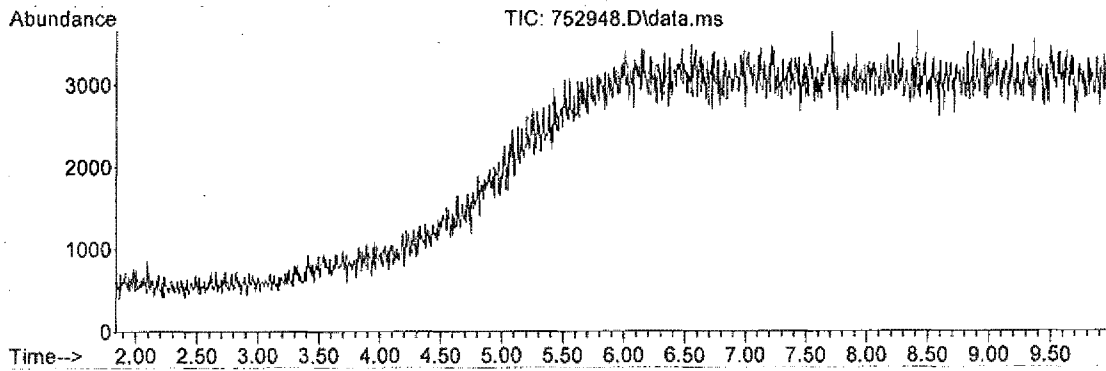
Area Percent / Library Search Report

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Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752948.D  
Operator : P. PIRO  
Date Acquired : 4 Nov 2010 6:25  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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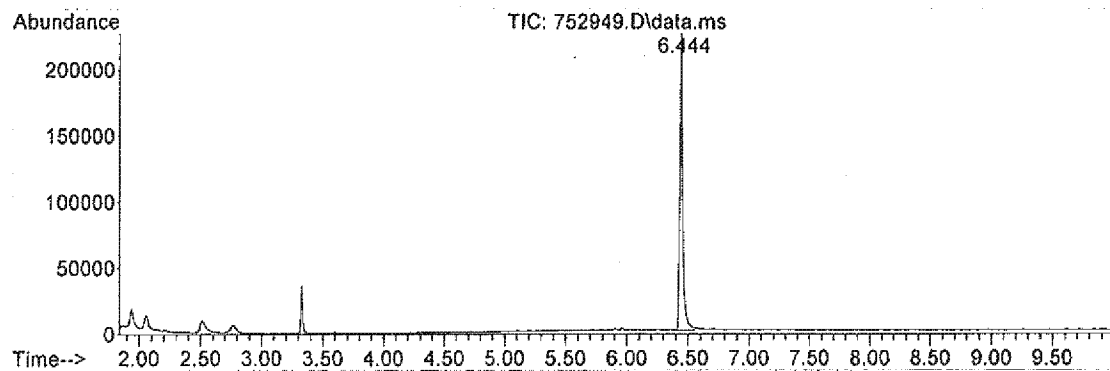
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752949.D  
 Operator : P. PIRO  
 Date Acquired : 4 Nov 2010 6:38  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 49  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.444	371763	100.00	100.00

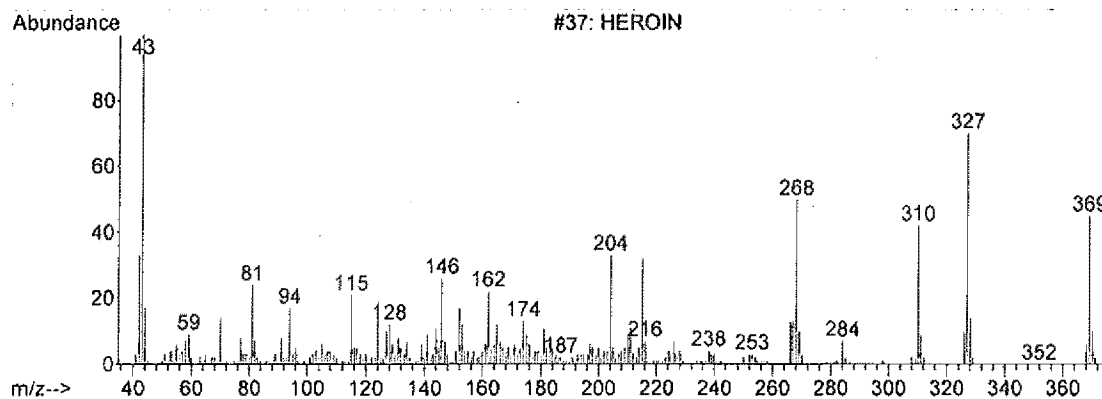
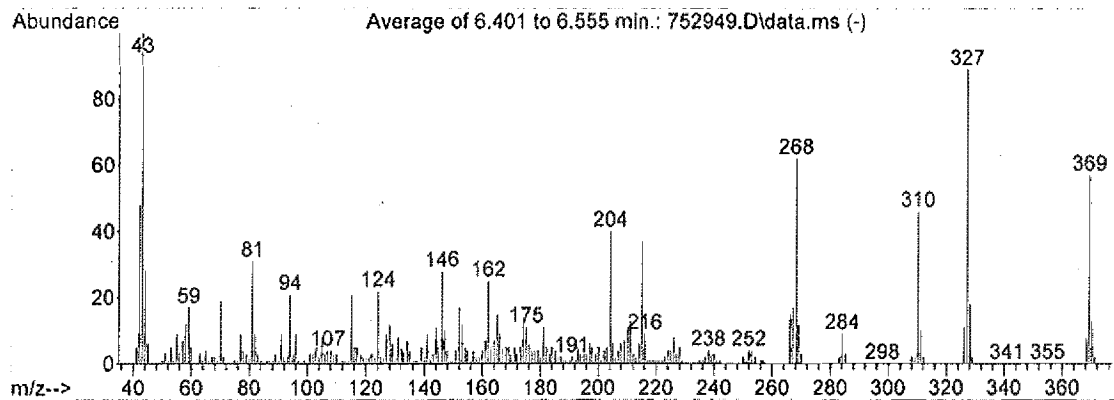
## Area Percent / Library Search Report

## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752949.D  
Operator : P. PIRO  
Date Acquired : 4 Nov 2010 6:38  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 49  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

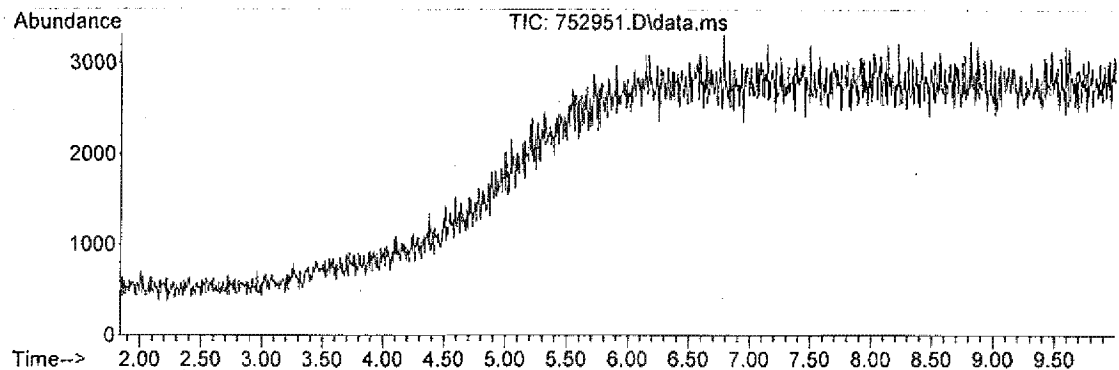
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.44	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		HEROIN	000561-27-3	95



## Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752951.D  
Operator : P. PIRO  
Date Acquired : 4 Nov 2010 7:03  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



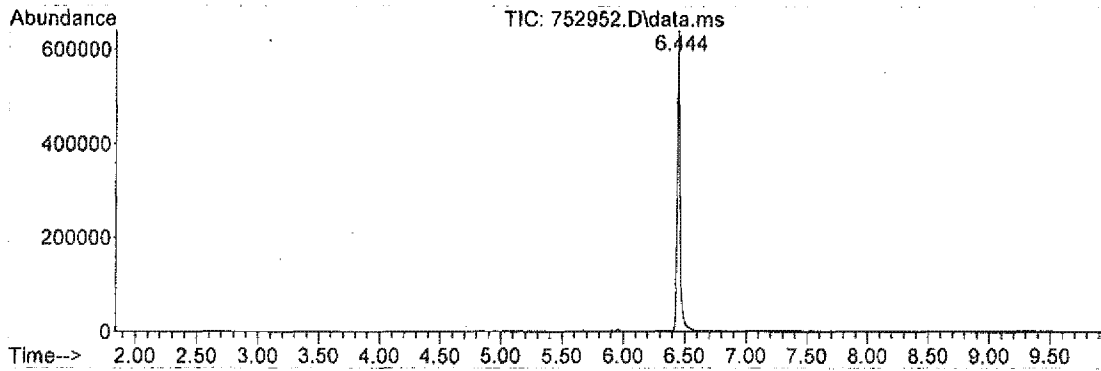
Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : C:\msdchem\1\System7\11\_03\_10\752952.D  
 Operator : P. PIRO  
 Date Acquired : 4 Nov 2010 7:16  
 Sample Name : HEROIN STANDARD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.444	998319	100.00	100.00

# Area Percent / Library Search Report

**Information from Data File:**

File Name : C:\msdchem\1\System7\11\_03\_10\752952.D  
 Operator : P. PIRO  
 Date Acquired : 4 Nov 2010 7:16  
 Sample Name : HEROIN STANDARD  
 Submitted by :  
 Vial Number : 6  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.44	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		HEROIN	000561-27-3	99

